Inventor(s): Yoichi MIZUTANI et al.
Invention: Imaging Apparatus for ... Image Data
Serial No.: 09/354,476

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FIG.1

(PRIOR ART)
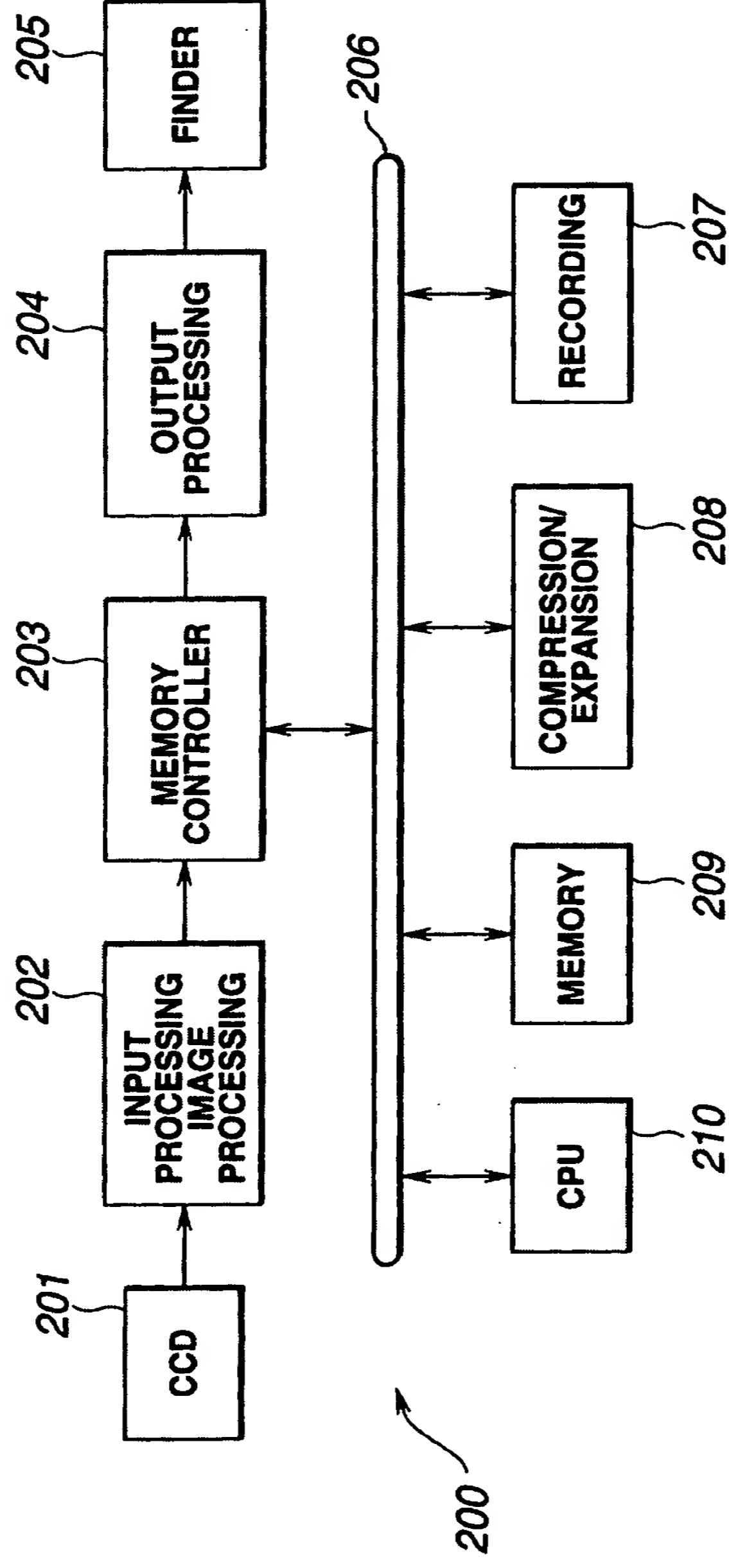
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FIG.2

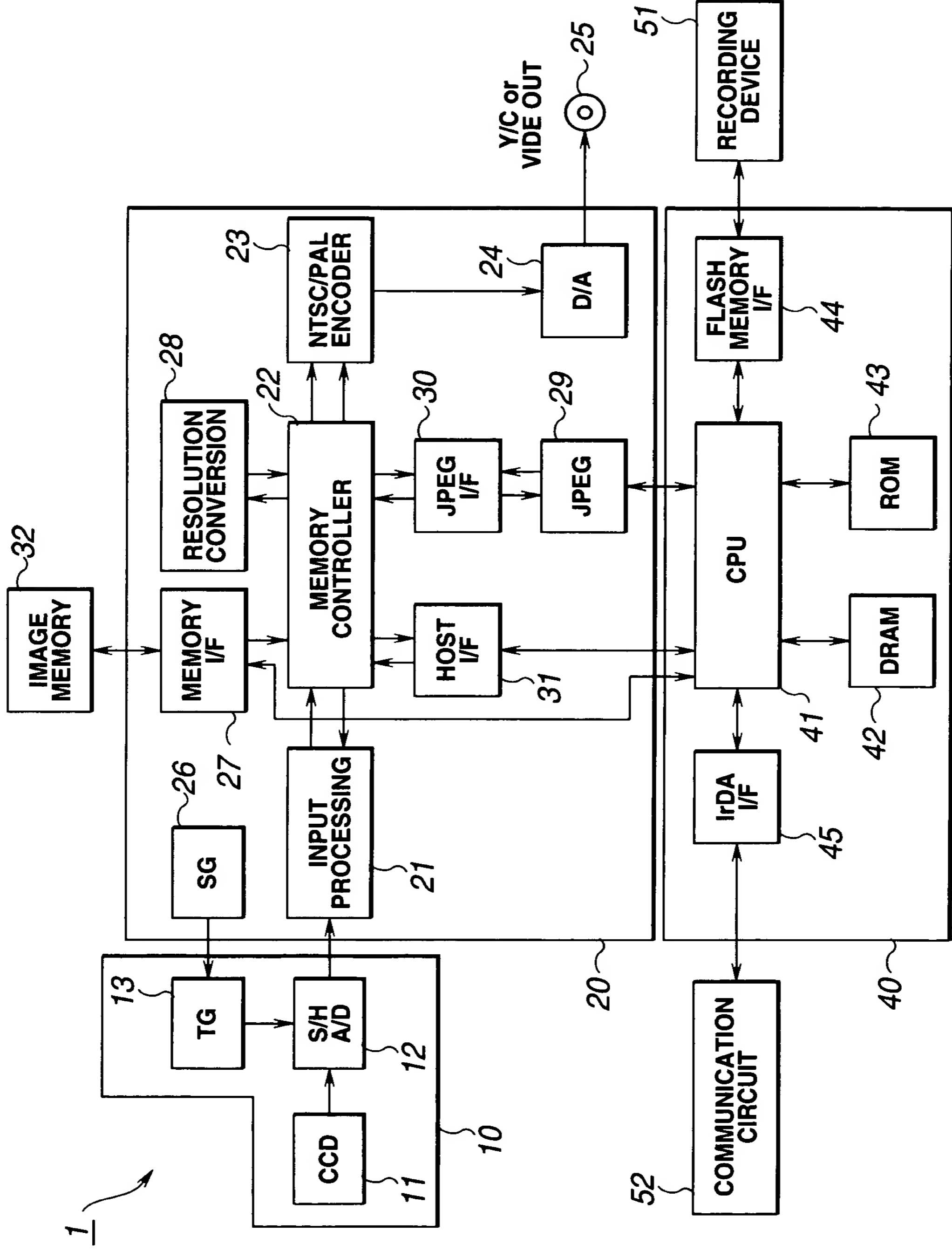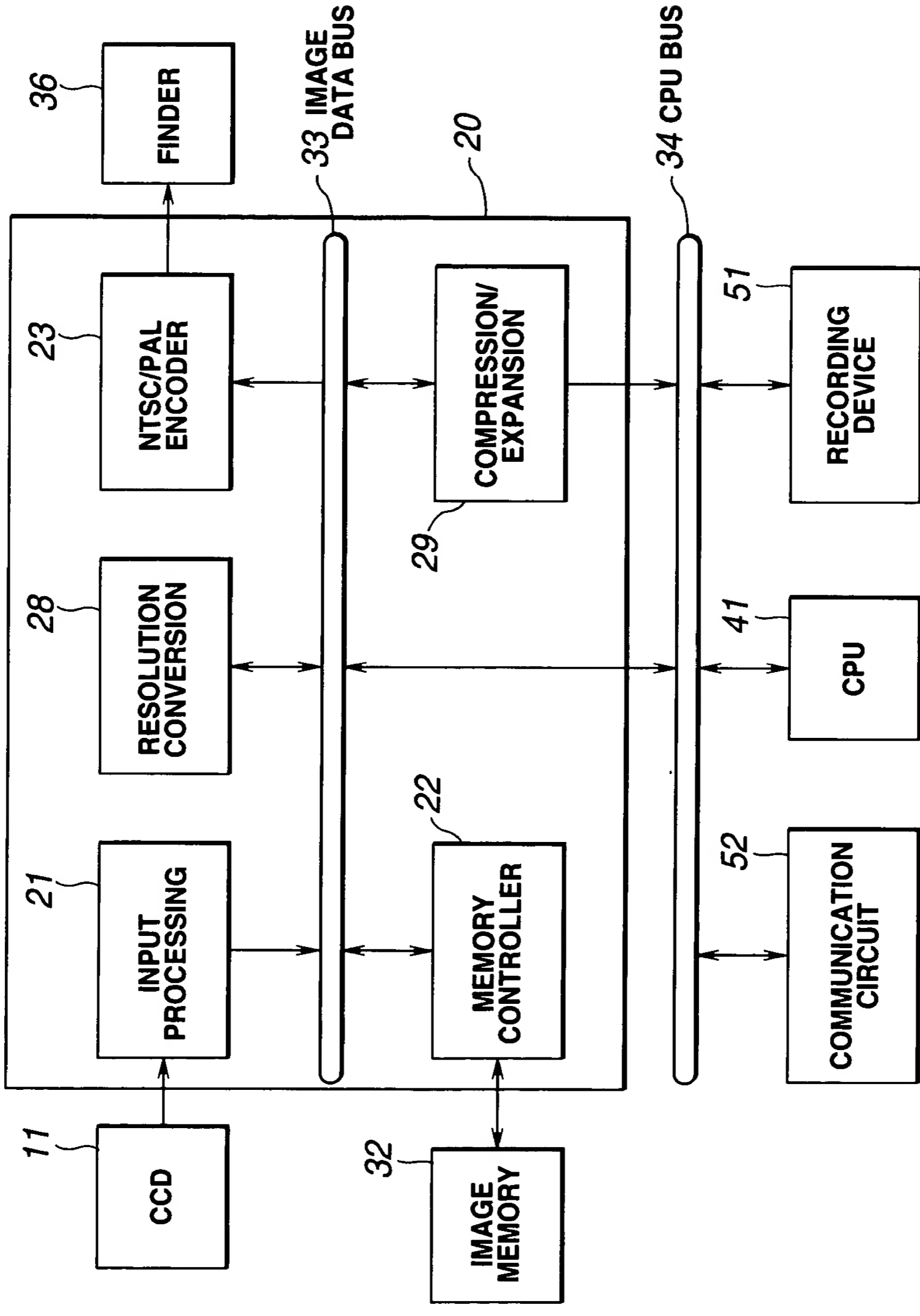Inventor(s): Yoichi MIZUTANI et al.
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FIG.3

Inventor(s): Yoichi MIZUTANI et al.
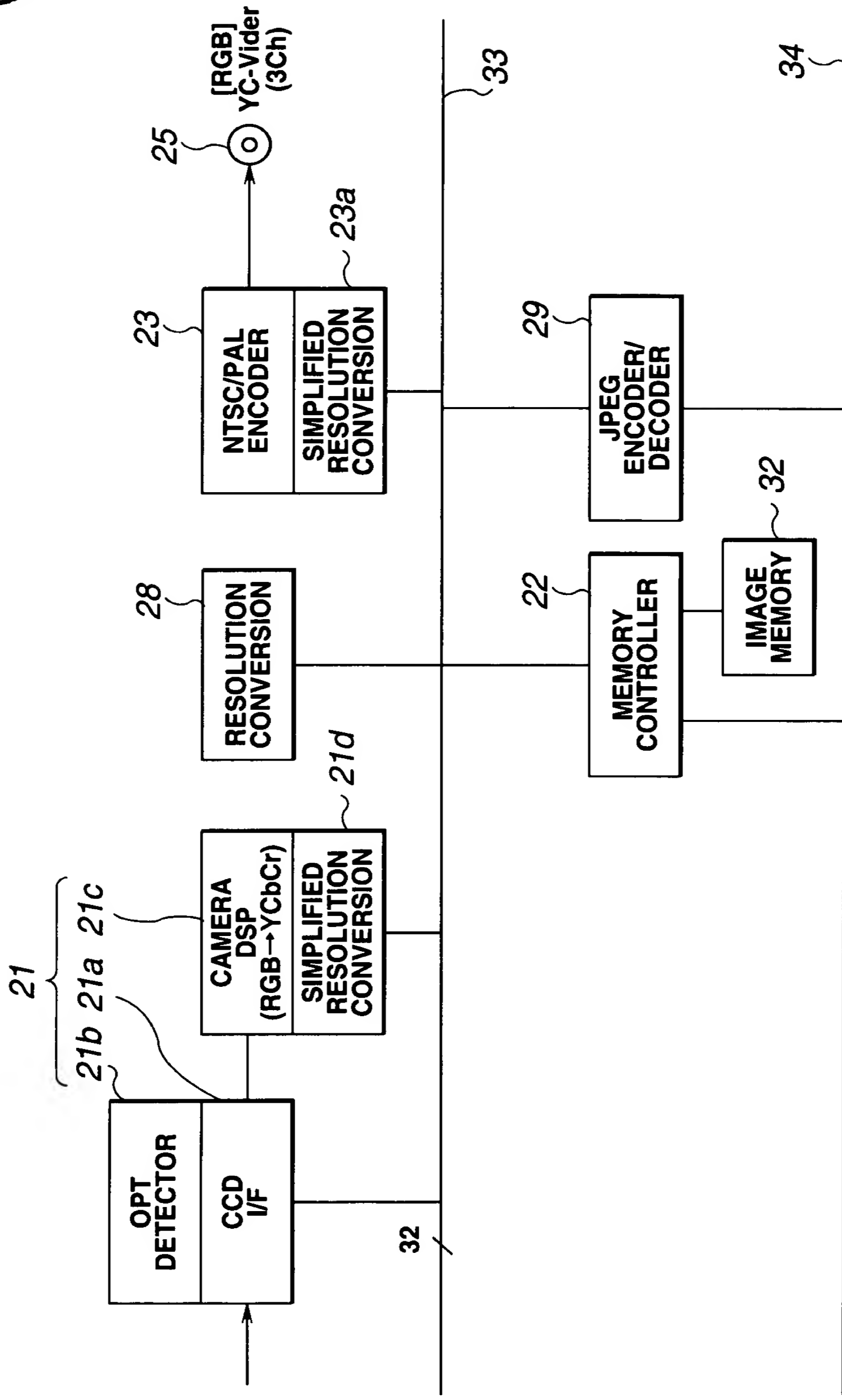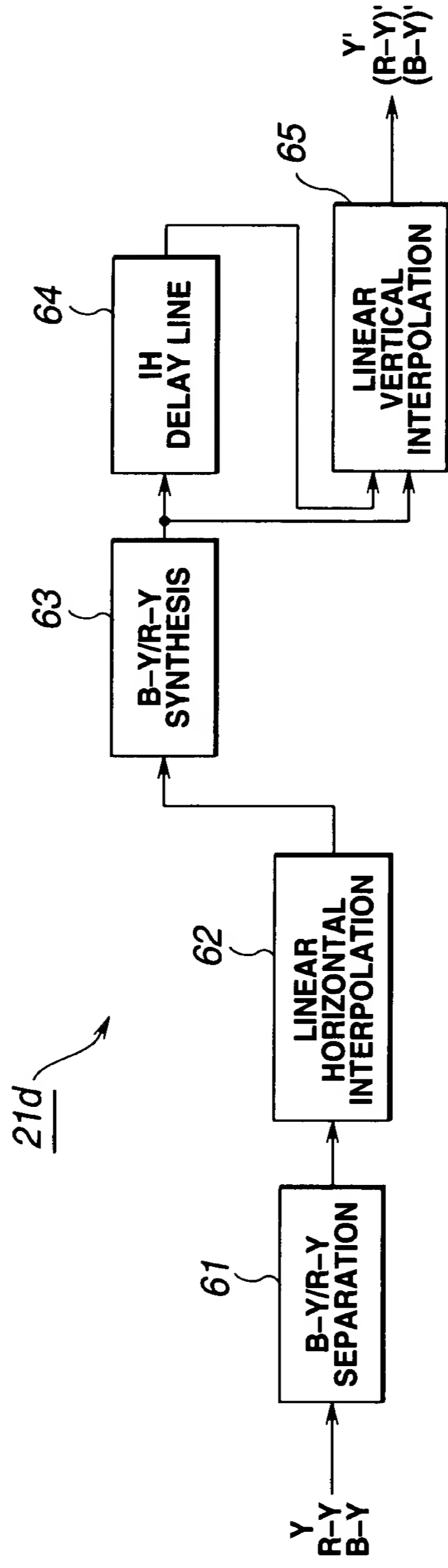Invention: Imaging Apparatus for ... Image Data
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FIG.4

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Invention: Imaging Apparatus for ... Image Data
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21d

Y
R-Y
B-Y

→ **61** B-Y/R-Y SEPARATION → **62** LINEAR HORIZONTAL INTERPOLATION → **63** B-Y/R-Y SYNTHESIS → **64** IH DELAY LINE → **65** LINEAR VERTICAL INTERPOLATION →

Y'
(R-Y)'
(B-Y)'

FIG.5

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FIG.6

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FIG.7

Inventor(s): Yoichi MIZUTANI et al.
Invention: Imaging Apparatus for ... Image Data
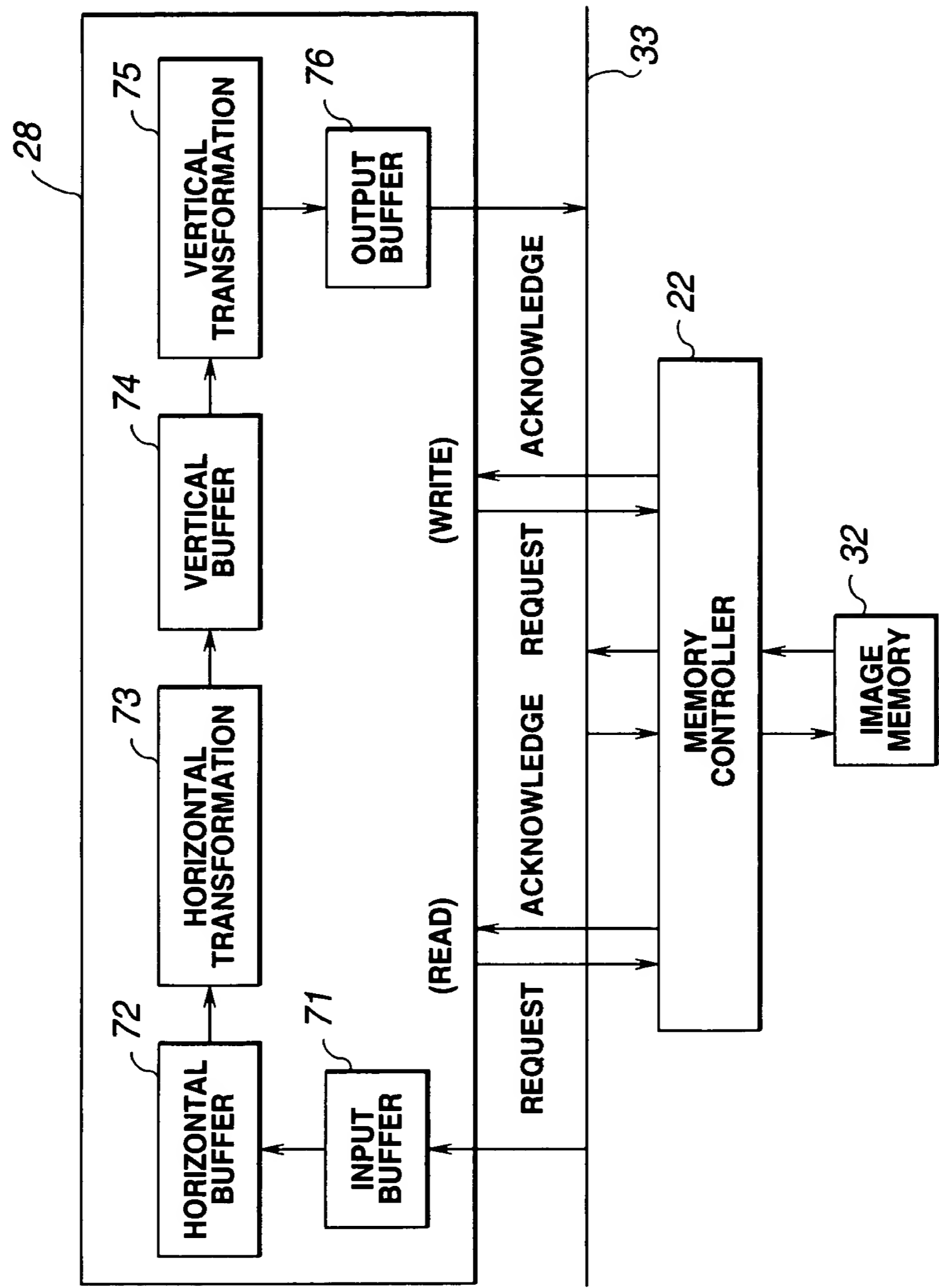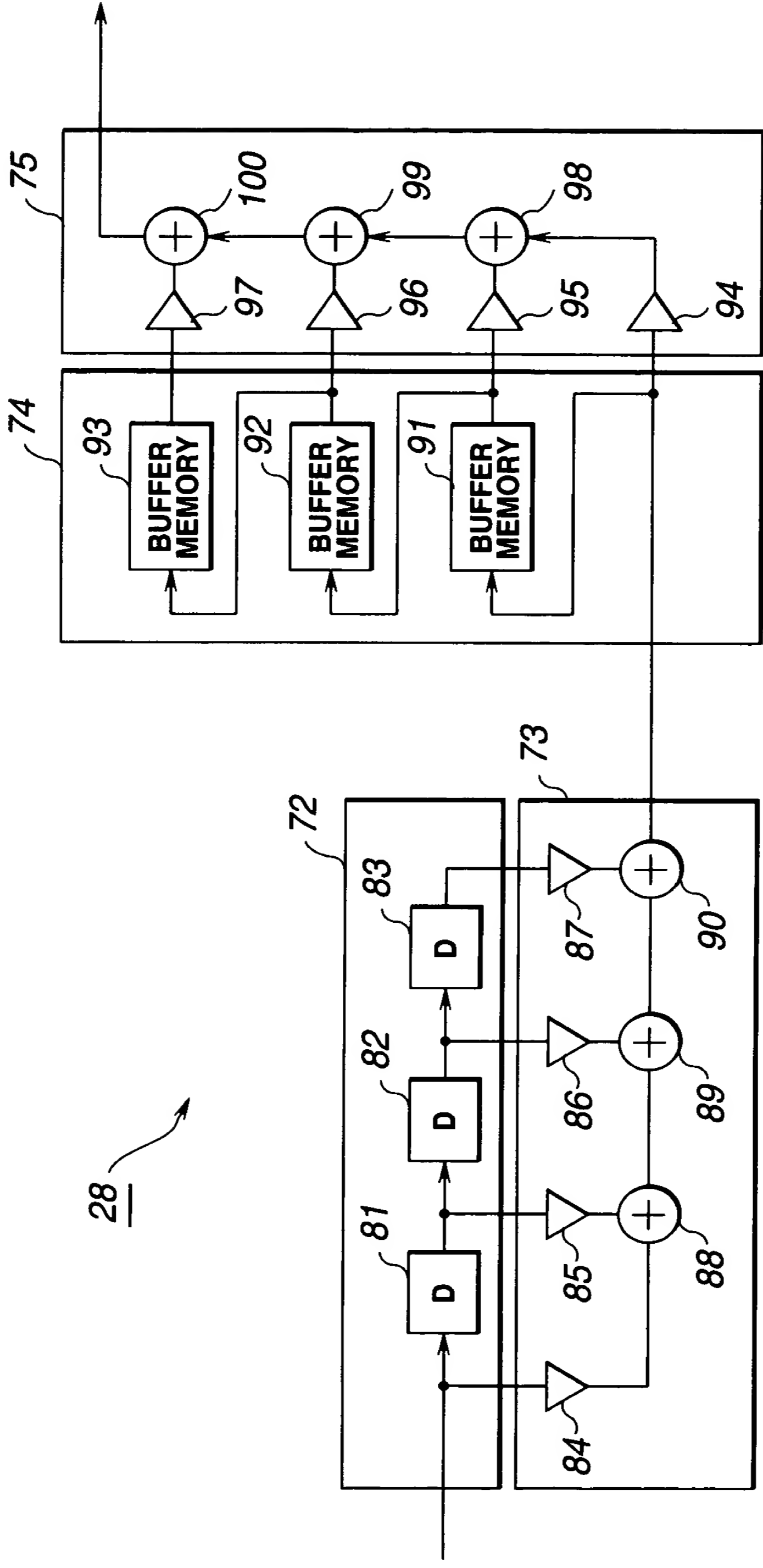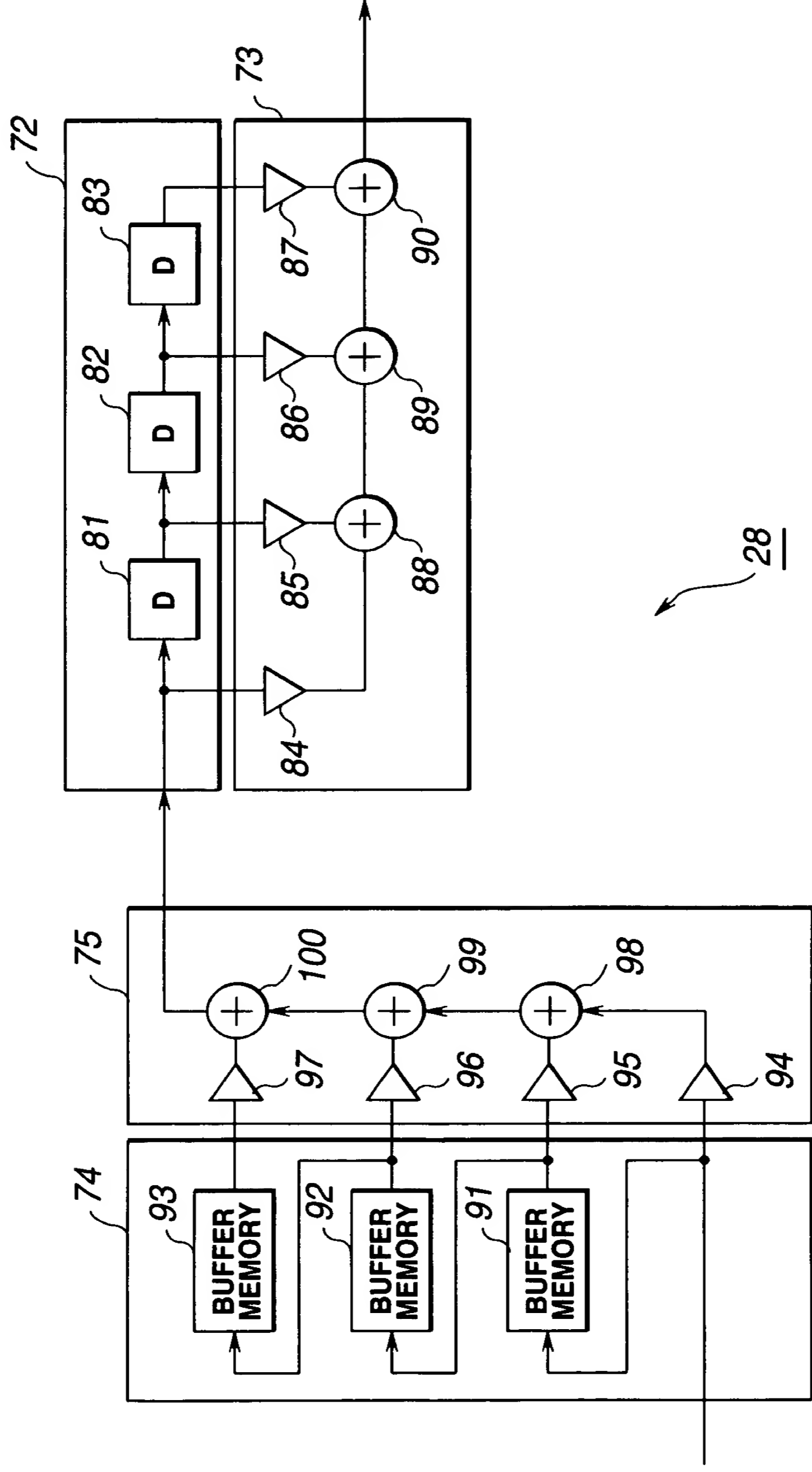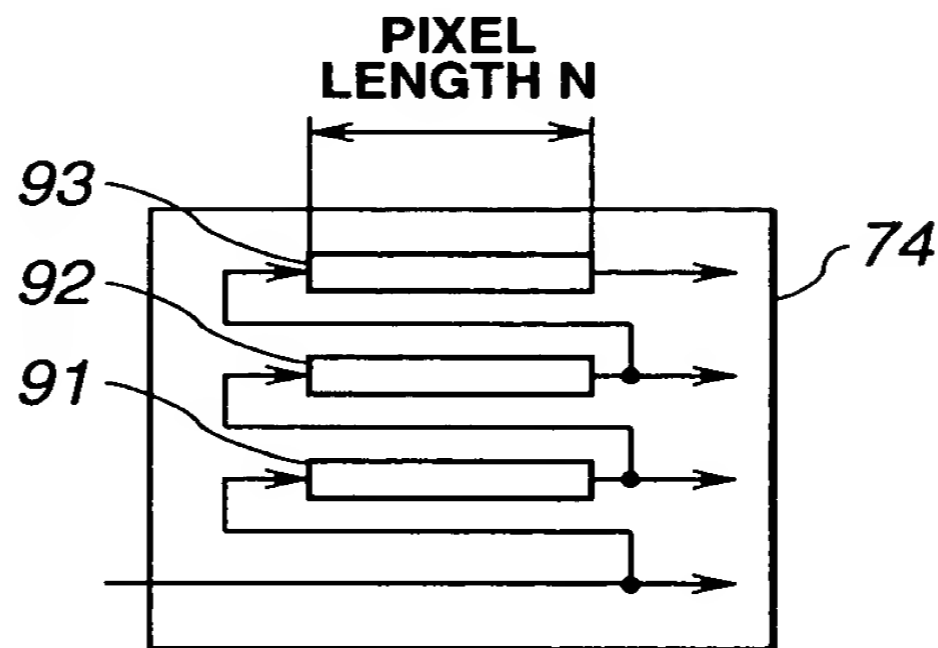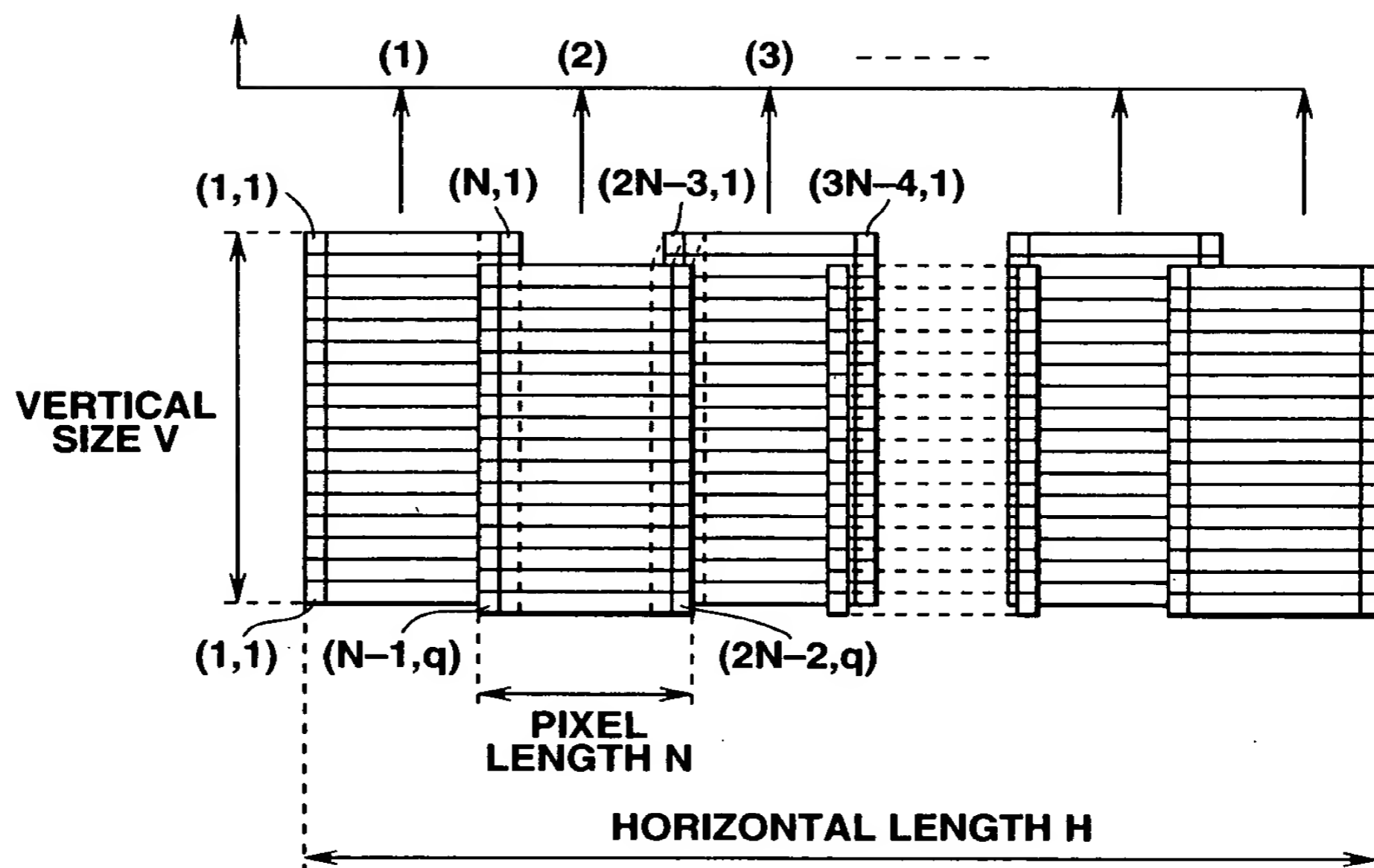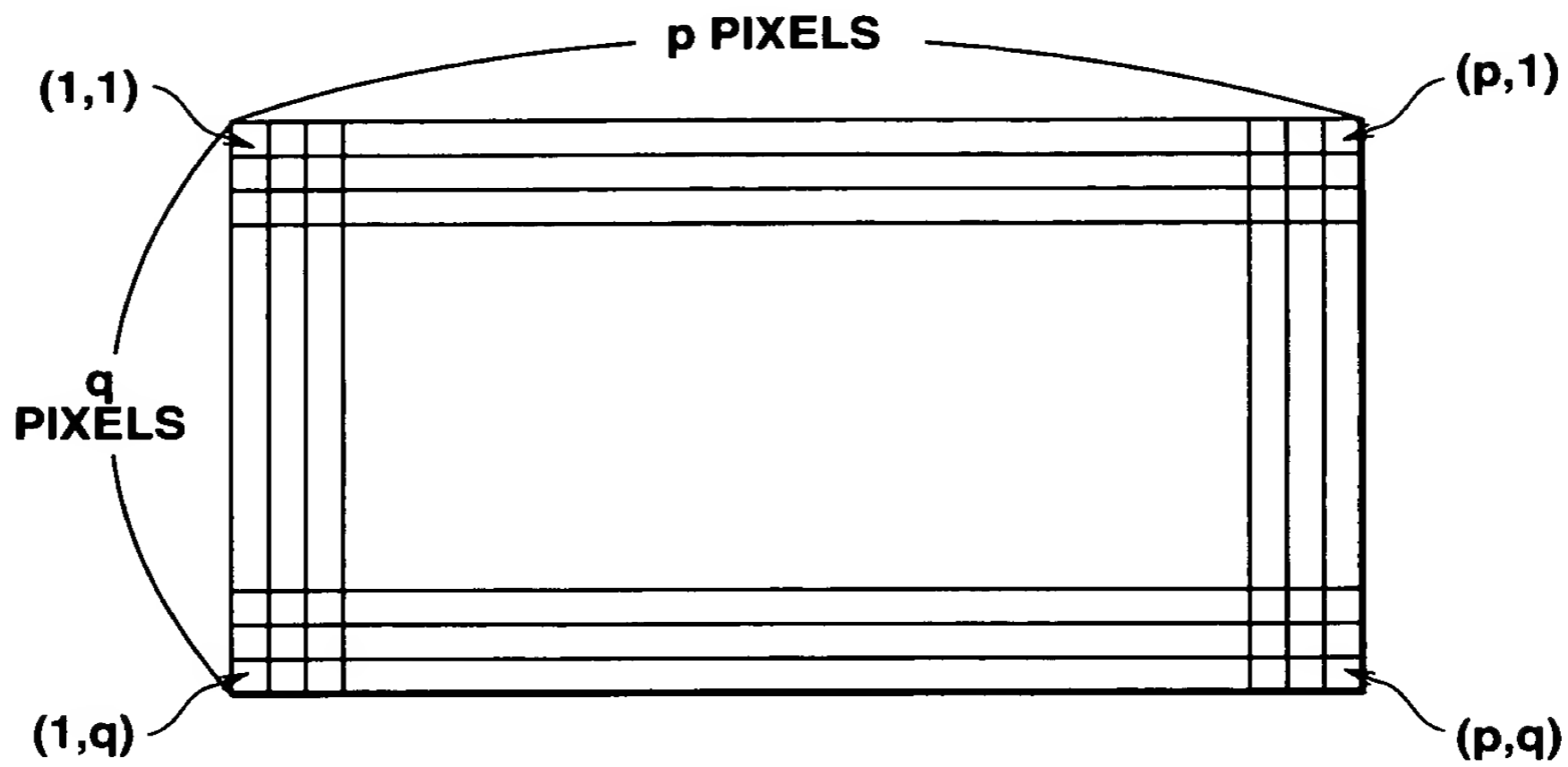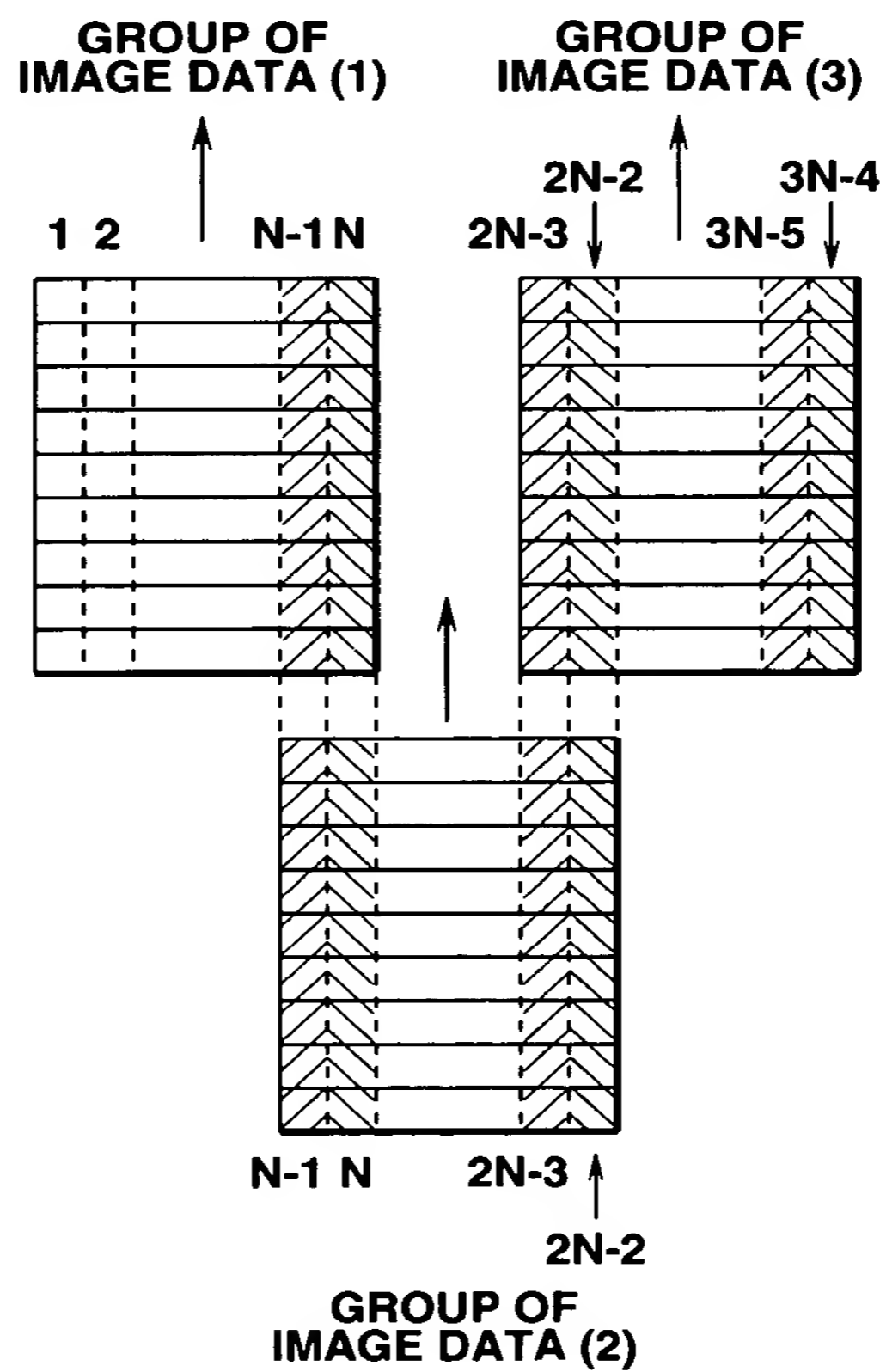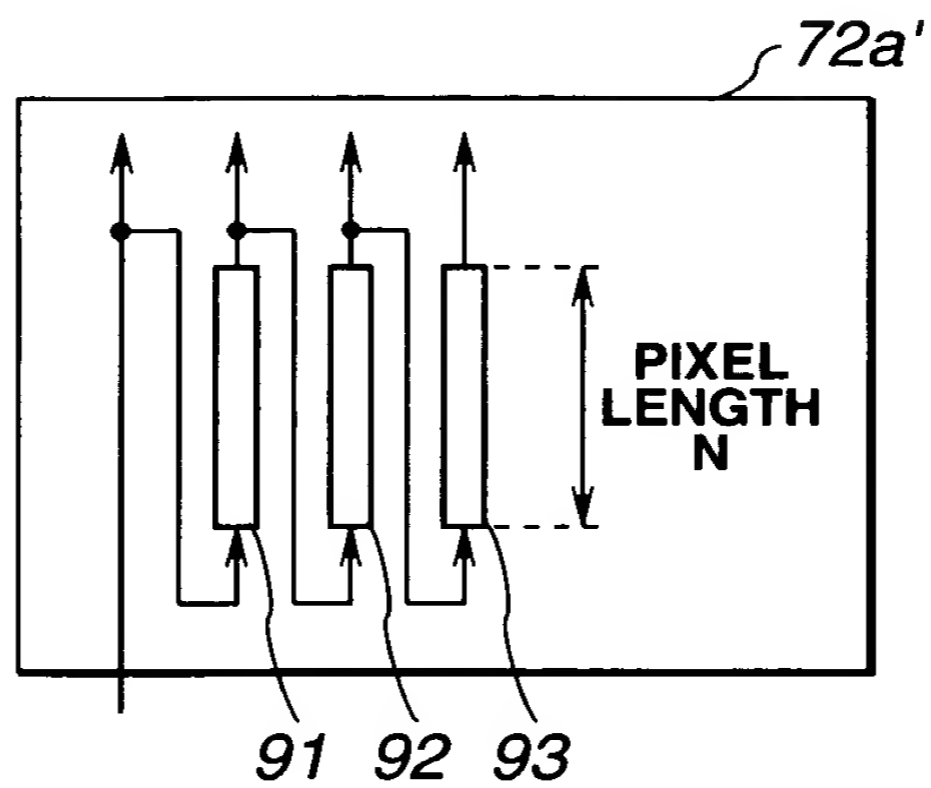**Serial No.:** 09/354,476

FIG.8

PIXEL
LENGTH N

93

92

91

74

FIG.9

(1)   (2)   (3)   - - - - -

(1,1)   (N,1)   (2N–3,1)   (3N–4,1)

VERTICAL
SIZE V

(1,1)   (N–1,q)   (2N–2,q)

PIXEL
LENGTH N

HORIZONTAL LENGTH H

FIG.10

p PIXELS

(1,1)

(p,1)

q
PIXELS

(1,q)

(p,q)

FIG.11

GROUP OF
IMAGE DATA (1)

GROUP OF
IMAGE DATA (3)

2N-2   3N-4
2N-3   3N-5

1 2   N-1 N

N-1 N   2N-3
2N-2

GROUP OF
IMAGE DATA (2)

FIG.12

72a'

PIXEL
LENGTH
N

91 92 93

FIG.13

PIXEL
LENGTH
N

FIG.14

_23a_

_101_

_102_

_103_

a

in ○→ | LINE MEMORY | b → | V-DIRECTION LINEAR INTERPOLATION | c → | H-DIRECTION | → ○ out

$c = g * a + (1-g) * b$

FIG.15

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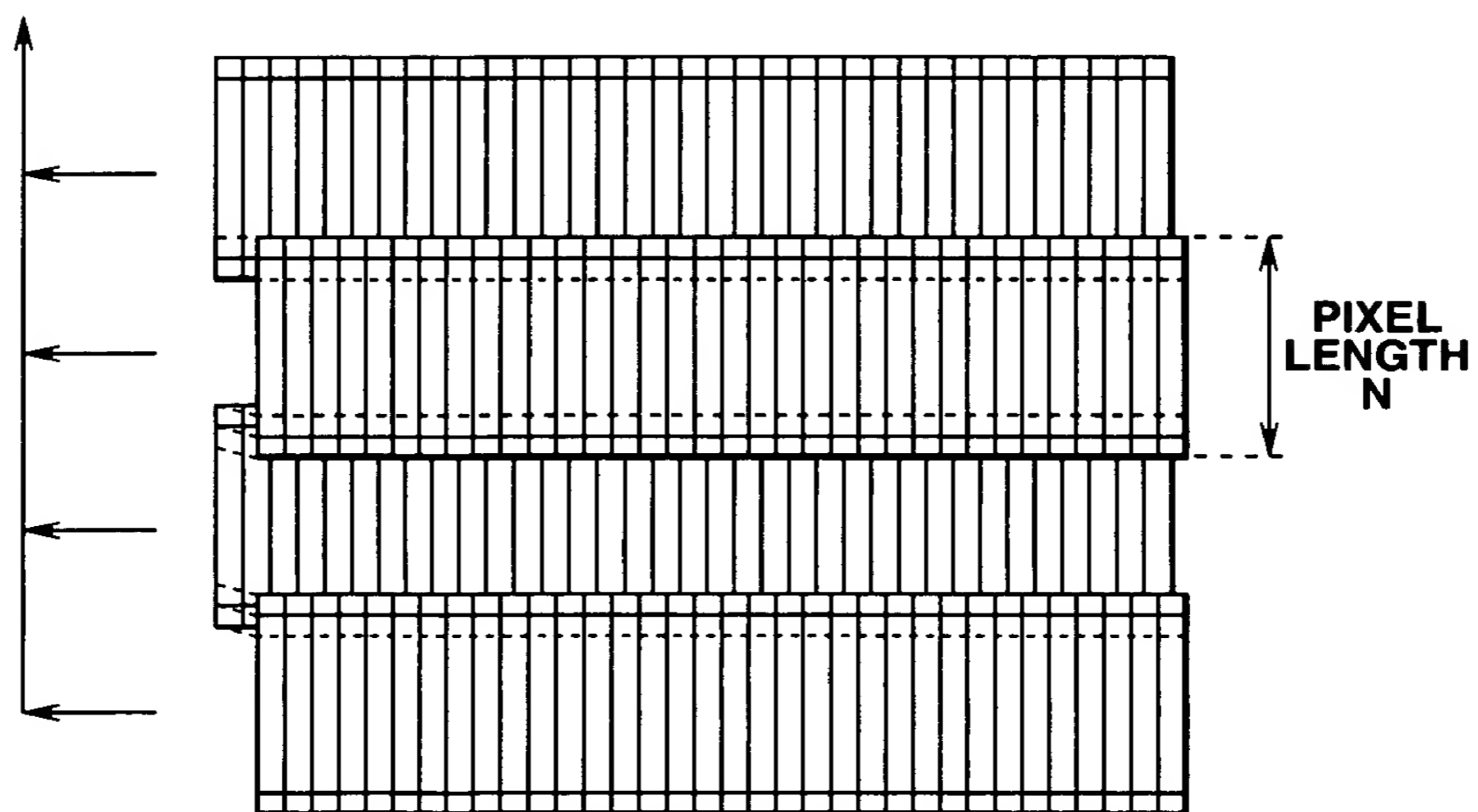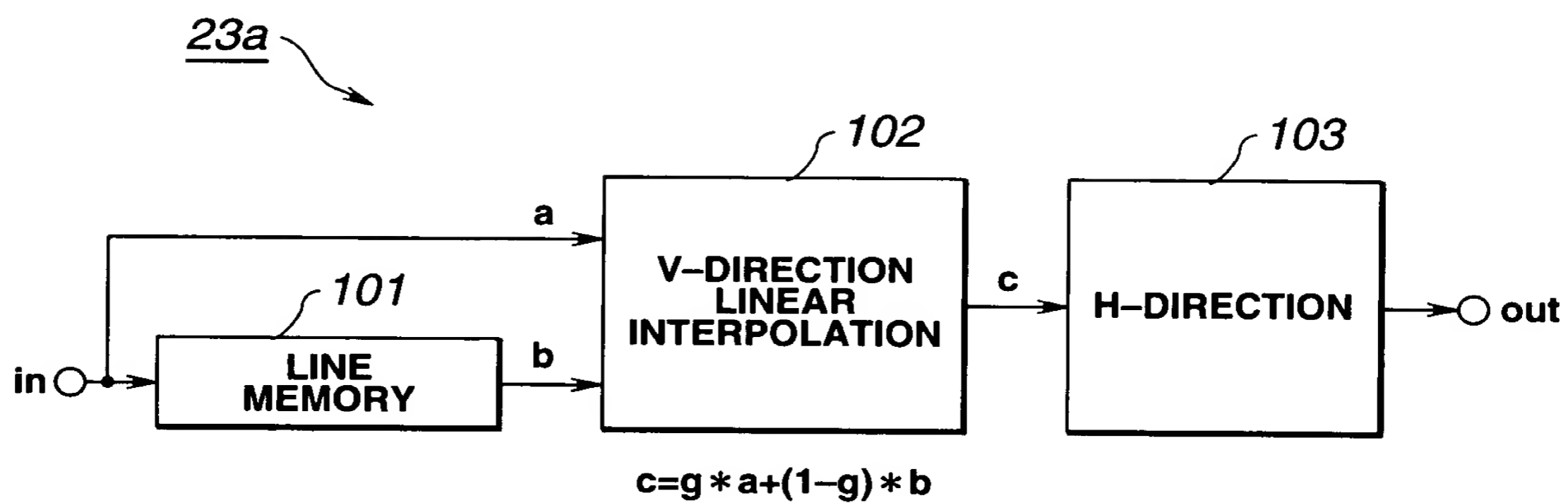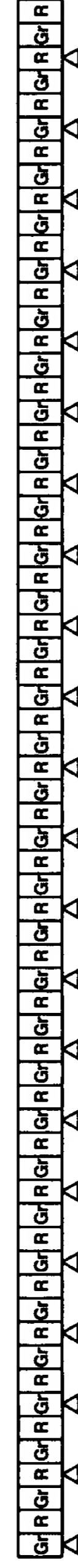Serial No.:   09/354,476

FIG.16A CCLK 12.27MHz

FIG.16B CCD1F→ CAMDSP

1/3 THINNING

FIG.16C CAMDSP →DRAM

FIG.16D DRAM→ NTSC

YC422(320×240)

FIG.16E DRAM→ OSD

FIG.16F IBUS→ DRAM (16bit)

DRAM→ NTSC   DRAM→ OSD   CAMDSP→ DRAM

C→D   D→N   D→N C→D D→O   D→N   D→N   C→D   D→N   D→O